

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended): Mineral wool capable of dissolving in a physiological medium, ~~characterized in that it~~ wherein the wool comprises the constituents below in the following percentages by weight:

SiO <sub>2</sub>	39-44%, <del>preferably 40-43%</del>
Al <sub>2</sub> O <sub>3</sub>	16-27%, <del>preferably 16-26%</del>
CaO	6-20%, <del>preferably 8-18%</del>
MgO	1-5%, <del>preferably 1-4.9%</del>
Na <sub>2</sub> O	0-15%, <del>preferably 2-12%</del>
K <sub>2</sub> O	0-15%, <del>preferably 2-12%</del>
R <sub>2</sub> O (Na <sub>2</sub> O + K <sub>2</sub> O)	10-14.7%, <del>preferably</del>
	<hr/> 10-13.5%
P <sub>2</sub> O <sub>5</sub>	0-3%, <del>especially 0-2%</del>
Fe <sub>2</sub> O <sub>3</sub> (total iron)	1.5-15%, <del>especially 3-8%</del>
B <sub>2</sub> O <sub>3</sub>	0-2%, <del>preferably 0-1%</del>
TiO <sub>2</sub>	0-2%, <del>preferably 0.4-1%</del>

wherein the wool comprises at least 2% MgO when alumina is present in an amount of less than 22%.

2. (Currently Amended): Mineral wool according to claim 1, ~~characterized in that~~ wherein the CaO content is between 9.5 and 20%.

3-4. (Canceled).

5. (Currently Amended): Mineral wool according to claim 1, ~~characterized in that~~  
wherein the alkali metal oxide content is less than or equal to 13.0%.

6. (Currently Amended): Mineral wool according to claim 1, ~~characterized in that~~  
wherein the  $R_2O/Al_2O_3$  molar ratio is less than 0.9.

7. (Currently Amended): Mineral wool according to claim 1, ~~characterized in that it~~  
~~contains~~ wherein the wool comprises 2 to 6% iron oxide.

8. (Currently Amended): Mineral wool according to claim 1, ~~characterized in that it~~  
~~contains~~ wherein the wool comprises 1% or less of titanium oxide.

9. (Currently Amended): Mineral wool according to claim 1, ~~characterized in that it~~  
wherein the wool has a viscosity at a temperature of 1400°C of more than 70 poise.

10. (Currently Amended): Mineral wool according to claim 1, ~~characterized in that~~  
~~its composition~~ wherein the wool has a shrinkage at 700°C of less than 40% and a shrinkage  
at 800°C of less than 90%.

11. (Currently Amended): A fire-resistant structural system comprising ~~The method~~  
~~of using a mineral wool according to claim 1 in fire-resistant structural systems or as~~  
~~insulation employed at high temperature.~~

12. (New): Insulation comprising a mineral wool according to claim 1.
13. (New): Mineral wool according to claim 1, wherein the  $\text{SiO}_2$  content is between 40 and 43%.
14. (New): Mineral wool according to claim 1, wherein the  $\text{Al}_2\text{O}_3$  content is between 16 and 26%.
15. (New): Mineral wool according to claim 1, wherein the  $\text{CaO}$  content is between 6 and 20%.
16. (New): Mineral wool according to claim 1, wherein the  $\text{MgO}$  content is between 1 and 4.9%.
17. (New): Mineral wool according to claim 1, wherein the  $\text{Na}_2\text{O}$  content is between 2 and 12%.
18. (New): Mineral wool according to claim 1, wherein the  $\text{K}_2\text{O}$  content is between 2 and 12 %.
19. (New): Mineral wool according to claim 1, wherein the  $\text{Na}_2\text{O} + \text{K}_2\text{O}$  content is between 10 and 13.5%.
20. (New): Mineral wool according to claim 1, wherein the  $\text{P}_2\text{O}_5$  content is between 0 and 2%.
21. (New): Mineral wool according to claim 1, wherein the  $\text{Fe}_2\text{O}_3$  (total iron) content is between 3.2 and 8%.
22. (New): Mineral wool according to claim 1, wherein the  $\text{B}_2\text{O}_3$  content is between 0 and 1%.
23. (New): Mineral wool according to claim 1, wherein the  $\text{TiO}_2$  content is between 0.4 and 1%.